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CANADIAN HOME ECONOMICS JOURNAL



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CANADIAN HOME ECONOMICS ASSOCIATION

- THE FUTURE OF C.H.E.A.
- THE NEW PORK AS A FOOD





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President's Message



From left to right standing: Sr. Marielle Prefontaine, U. de Moncton; Dr. H. C. Abel, U. of Saskatchewan; Dr. E. Feniak, U. of Manitoba; Miss P. McDermott, U. of Windsor; Dr. A. Kernalguen, U. of Alberta; Dr. J. MacKay, U. of P.E.I.; Dr. Margery King; Dr. V. Campbell, Acadia; Dr. L. E. Lloyd, U. of Manitoba; Miss M. Maskow, Ryerson; Dr. E. S. Idziak, McGill; Miss H. R. Nielson, McGill; Sr. Claire Dalmé, U. de Montréal; Sr. Francoise Saint-Helaire, U. de Laval. Seated: Miss W. Bracher, U.B.C.; Miss M. J. Guilford, U. of Saskatchewan; Dr. J. M. Wardlaw, U. of Guelph; Miss M. L. Morley, Mount St. Vincent; Sr. Lucie Blondeau, U. of Ottawa. Absent from photo: Dr. P. M. Giovanetti, Brescia College.

At the Board and Annual Meetings June 15th and 16th, 1973, many far-reaching decisions were approved. Some I wish to draw to your attention.

In July of 1972 at the Annual Meeting in Halifax an ad hoc committee was set up to "Study the Feasibility of Establishing the Position of Executive Director in the Canadian Home Economics Association". Under the very able chairmanship of Dr. Elizabeth Feniak an excellent report was presented and discussed. As a result the recommendation that "as a pilot project the appointment of an Executive Director on a full-time basis for 1974-76" was approved. Funds are needed, membership must increase, public relationships are necessary.

Another issue was the report received from Deans and Directors of Faculties and Schools of Home Economics across Canada. This group is concerned that too few of their graduates are joining our organization. At the conclusion of their deliberations a position paper was forwarded to your executive. This paper will be discussed in detail in an article prepared for this issue of the Journal. After extensive discussion of this report at our meetings it was moved that a task force be established "to examine and redefine goals and objectives of the Canadian Home Economics Association in light of current concepts and directions in all relevant academic ideas". As Chairman of the Professional Development Committee, Miss May Maskow has agreed to proceed with this important matter.

Big steps have been taken. We have committed ourselves to major undertakings. We are all involved. I am counting on your support.

Winifred J. Bracher

Winifred J. Bracher, President.

The Future of C.H.E.A

May Maskow, Ryerson Polytechnical Institute, Toronto

What is happening to C.H.E.A.? What is its future? Does C.H.E.A. need a "happening"?

Undergraduate education in our field has recently made drastic but positive changes in philosophy, curricula, and objectives. Home Economics students now can expect to find in their programmes such courses as Family Dynamics, Human Sexuality, Consumer Ecology, Marketing and Consumer Law. The graduate of the 70's may or may not know how to turn out a bound buttonhole and she might never have occasion to demonstrate her expertise in white sauces.

Is C.H.E.A. appealing as a professional organization to these present and future graduates? What does the organization offer to them besides four journals a year and the opportunity to attend a biennial convention? Does C.H.E.A. capitalize on the recent graduate's enthusiasm and vital idealism?

Apparently not. Statistics from our C.H.E.A. office indicate that of 669 graduates in 1971, 102 became members and in 1972, of 696 graduates, 74 joined the Association.

In the active professional arena, there have been changes of focus, too. Terms like "consumer consultant", "urban home economist", "family living teacher" and "community nutritionist" were unheard of ten years ago (it was "cooking and sewing"). The business professional now deals more than ever before in marketing, and companies are placing more demands on her to deal directly with consumer concerns. The government has also recognized "consumerism". In addition to Departments of Agriculture, the Consumer and Corporate Affairs Department has become an employer of some of our membership.

In high schools family life education and consumer studies are now basic to Home Economics curricula. Teachers who may have based (consciously or subconsciously) their teaching on the values of a middle class oriented society are challenged by students with a variety of values.

Furthermore, as families switch the focus of many of their activities from the home to the community, professionals in our field are finding (and in some cases, creating) positions in family service agencies, urban housing developments, social welfare organizations and on local health and medical teams.

Is C.H.E.A. a meaningful organization which encourages membership from these active professionals? Can they easily claim allegiance to, contribute to, and gain some benefits from, the Association?

A look again at numbers may be some indication. It is estimated that in 1973 there are over 6,000 Home Economics graduates professionally employed in Canada, yet the total C.H.E.A. membership reported on March 31, 1973 was 1,141.

The actions of governments is another area of concern. Both federal and provincial legislation is being rapidly made on issues vital to what we claim as our concerns. Furthermore, in this age of participatory democracy, our legislators are encouraging input from concerned professional groups in such areas as consumer protection, the status of women, metrication, family welfare and soon it will be time for Nutrition Canada results. Where is the voice of C.H.E.A.? Or do we leave this role to various pressure groups?

Finally, we as professionals must be delighted that the World Federation of Home Economics is meeting in Ottawa in 1976. But we must also be concerned that we have a strong and active Association that can ably host such an event and gain the rich benefits such an undertaking affords.

It is with the background of the above concerns that the Deans and Directors of University Courses in Canada planned the agenda of their November 1972 conference in Toronto. The object of the meetings was to prepare and present a position paper on "The Role and Future of C.H.E.A." to present to the executive.

To this end, Dr. Margery King was invited (courtesy of General Foods) to give an opening address and to be present at the group's deliberations. Dr. King works with many professional organizations in Canada and it was intended that she give a fresh perspective on the task of the conference.

The following is an excerpt from Dr. King's opening address:

Many organizations, including Home Economics are doing some soul searching and asking themselves, "What is our role? What are we doing?" Why do we exist?"

Let me examine types and functions of organizations in black and white terms:

Organizations may be of 2 types:

- I. *For Members*. Exist to serve needs of members, maintain the conditions under which members carry out their functions. Examples are professional organization, trade union.
- II. *For Society*. Such an organization is a movement in society. It is an umbrella approach under which groups of people who are concerned about a problem have come together and organized. Example is Canadian Mental Health Association.

I don't mean to imply that the first type does not do a great deal

of good to society and in society or that the second type does not do good to members *but* the first type does not exist because of the good it does in society but rather for the benefit of its members. The second type does not exist because of needs of its members but exists around a concern or a problem in society.

Characteristics of each of these organizations:

I. Exists primarily for members

- Define members — restricted membership on specified basis — education, skill, (union — musician, electrician) job you do (postal employees) personal characteristics (wealth, Scottish organization), common characteristics for members — hard to get in — exclusive.
- Membership often confers status or confers certain privileges — members are permitted to do something.
- Efforts of members to improve their lot — often interpreted as protecting the public but often it is question of protecting self. This protection frequently leads the organization into an adversary, policing kind of role.

II. A movement — the promotion of idea is the goal; something needs to be changed. Members are concerned about doing something for the needs of society. The membership is a mixture of professional or professional and lay people. The membership is around the commitment to the idea rather than around whom you are.

In between these 2 types of organizations are all shades of gray:

A. *In the medical profession* there is concern with salaries, working conditions, negotiations. There has even been withdrawal of services. But there is no question that through medical associations this profession finds means of voicing its opinion on health care and speaking on the behalf of all of us about issues that affect health.

B. *Vanier Institute of Family* gave up exclusive membership because they became convinced that they couldn't achieve the aims of working on behalf of families in Canada and still maintain exclusiveness. They had to find ways of involving more people — so membership became non-exclusive.

The problem of being in the gray area is that you come to the question of priority. Is it more important for medical profession to be concerned about delivery of health services or about welfare of individual members? There is always potential conflict in gray areas.

Now to the problems of C.H.E.A.

— are you a profession or a movement?

Part of the concern is that a number of your potential members also have other professional organizations from which they can

get help. Therefore, you don't provide professional services to all would-be members. ⁽¹⁾

The deans and directors spent two days discussing C.H.E.A., its objectives and future, and prepared recommendations and a position paper by which they could communicate their concern to the executive.

Discussion flowed around several considerations and questions. First, is C.H.E.A. built on the foundations of a definition of Home Economics? If so, the Association defined the profession in 1964 by the training which a professional receives:

"A Home Economist is one who holds a university degree in Home Economics and applies her knowledge in the fields of education, family living, nutrition, business, communication, or research."

This kind of definition assumes an inward looking kind of organization in which the Association's membership is restricted and its chief reason for existence is for the benefit of its membership.

If we consider later definitions, possibly those more consistent with modern university programmes and the activities of today's professionals, we have the definition:

"Home Economics is an area of study that correlates the humanities and sciences concerned with food, clothing, shelter and human relations and their affective application in the family, the community and the world."

The key word '*correlates*' is similar to a more recent definition which states that Home Economics is a "synthesizing discipline which brings a vast variety of disciplines and points of view to the solution of very complex problems."

If the latter definitions are adopted, a major objective of the Association would be to build partnerships and alliances with other disciplines and to provide a wide umbrella approach that would make it possible for several groups to work together. This could have the objective of studying particular issues and making recommendations to government and industry.

This kind of objective is consistent incidentally with one of the principal recommendations made in a recent study of the Science Council of Canada on National Engineering, Scientific and Technological Societies in Canada (C.H.E.A. was one of the societies studied):

"Societies through their coordinating and liaising bodies must consider their roles in relation to input to government, universities, industry and, most importantly, society. Any action which will encourage the development of an outward view among scientists must be prosecuted vigorously." ⁽²⁾

One should note that in the study the term 'science' refers to both the physical and social sciences.

Further to this, a specific suggestion in the study was that associations plan their annual meetings around the objective of studying a particular problem of society to come up with resolutions and viewpoints which they can then present to government, industry and society.

It is interesting to note that the study of National Engineering, Scientific, and Technological Societies in Canada, published just one month after the deans' and directors' meeting, indicated that the problems and concerns of the 121 organizations studied were the same as those of C.H.E.A. Indeed, they were the very problems discussed at the meeting. Some of these are: the recognition that a new direction in the need for revitalization; problems in communication, finances, bilingualism; involving the young; proportion of eligibles belonging to the society, and problems which centered around involvement with universities, industry, government and society.

One of the matters that concerned the deans and directors that is peculiar to C.H.E.A. was that for many of the membership other professional organizations to which they belong deal with such matters as salary negotiations, working conditions, etc., while for others, C.H.E.A. is the only professional alliance. Should C.H.E.A.'s structure be altered, for example, so that the Home Economist in Business (H.E.I.B.) group can form more solidly within the Association in order that some of their specific concerns can be better met?

The problems of involvement of French Canadian participation, membership (qualifications and fees), funding, and the desirability of acquiring an executive director were vital concerns.

Following are the recommendations and position of the deans made to C.H.E.A. regarding its role and future:

- I. Concern was expressed over the organization of C.H.E.A. due to:
 - A. Significant loss in membership over the past several years.
 - B. International Federation of Home Economics meetings scheduled for Ottawa — 1976.
 - C. Changing needs in society.
- II. The Deans and Directors recommend that C.H.E.A.
 - A. Reexamines and redefines its objectives.
 - B. Redefines its membership on basis of the objectives of organization.
 - C. Studies the possibilities of building partnerships and alliances with related disciplines.
 - D. Structures that organization so that it can take stands on important issues.
 - E. Undertakes an aggressive membership drive.
 - F. Considers a bold approach to outside funding. (This is only possible if the organization becomes a type II organization and is not possible under type I.)

Positions of the Deans and Directors

The consensus on the part of the deans and directors in relation to the above recommendations was:

- I. Re: *objectives and role of C.H.E.A.*

C.H.E.A. should give leadership in assuming a coordinating role for those concerned with the needs of individuals and families. This coordination would involve not only those associated traditionally

with Home Economics but would be extended to those from other disciplines and professional groups who share concern for the well being of the family.

Under this broad objective C.H.E.A. should focus on relevant social issues and seek to influence public policy in relation to the needs of individuals and families.

C.H.E.A. should support interaction among those sharing the concerns of the Association through conferences and symposia; continuing education programmes; professional publications; and through the use of all forms of the mass media.

II. Re: *definition of membership*

C.H.E.A. should consider broadening its membership to include individuals with a wide variety of post-secondary educational backgrounds. Indeed, the group questioned the present requirement of university education in Home Economics for full membership.

In redefining the membership, a definite position should be taken to the question of whether or not C.H.E.A. does at the present time, or should in the future, serve as a professional (type I) organization for its members or any segment of its membership.

Once the objectives of the Association and the criteria for membership have been examined and redefined, then C.H.E.A. must launch an aggressive membership drive.

III. Re: *funding*

The deans and directors consider the above recommendations to be of sufficient urgency to recommend to C.H.E.A. that all resources including the financial reserves of the Association be used to expedite an emergency meeting of the Board to deal with these critical issues.

Furthermore, if the new directions are such that it is appropriate to seek outside funding, a bold approach should be taken in seeking funding from industry, government, foundations and the private sector to further the objectives of the Association.

Since sending the above recommendations and position paper to the C.H.E.A. executive, a presentation of these concerns was made to the Canadian University Teachers of Home Economics (C.U.T.H.E.) at their annual meeting in June held in Kingston.

The university teachers met with enthusiasm the challenge of supporting and encouraging C.H.E.A. in a bid to revitalize. Generally they were in favour of a type II umbrella kind of organization.

Specifically, they were concerned that should a type II kind of organization develop, a mechanism in the organization be adopted whereby issues of a specific nature could be studied thoroughly by specialists in that particular area before proceeding for general C.H.E.A. adoption. This would likely occur at annual conventions and then be presented to government or a particular area of society in the form of recommendations.

Another specific suggestion made and endorsed by C.U.T.H.E. was that a mechanism be formed whereby university students could become individual student members of the Association. This would encourage continuing membership after graduation. (Presently the Association of Canadian Home Economics Students — A.C.H.E.S. — has university group membership which is affiliated with C.H.E.A. and has a representative on C.H.E.A.'s Board.)

It is felt that the enthusiasm demonstrated in the student organization is more likely to become a part of C.H.E.A. if students accept the responsibility of a professional membership (at a reduced fee), receive a journal, etc., while still undergraduates. This suggestion was met with enthusiasm by the A.C.H.E.S. representative who attended the Board of Directors meeting in June.

The Board of Directors at the annual meeting discussed the deans' and directors' recommendations and position paper with other relating concerns.

Following this it was moved:

That there be a task force established to examine and redefine goals and objectives of the Canadian Home Economics Association in the light of current concepts and directions in all relevant academic areas. ⁽³⁾

The Professional Development Committee was then asked to compose the task force and proceed with the resolution. At the same meeting the Board of Directors voted to hire an executive director in 1974.

As far as the role and future of C.H.E.A., Dr. King sees the Canadian Home Economics Association as playing a role in the "promotion of the art of family living".

"I see all kinds of social issues which need such approach — we have operated like people in high rise apartments. We can see people in the distance but there is no way we can get at them. We must get our organizations into structures like homes where each member has his own room but shares some rooms with other family members. We must not be concerned about building a few floors on top of our monolithic structures so that we have no time to get into family rooms. Issues such as nutrition, the family as a consuming unit, environmental protection, the status of women and many others are not issues which Home Economics can tackle alone but Home Economics can bring many groups together who share a concern in these issues." ⁽⁴⁾

- (1) King, Dr. Margery, "Opening Address". Paper presented at meeting of Deans and Directors of University Home Economics Programmes in Canada, Toronto, November, 1972.
- (2) Canada. Information Canada. Science Council of Canada. *Special Study No. 25. National Engineering, Scientific and Technological Societies of Canada.* 1972. p. 96.
- (3) Minutes of Annual Meeting of Board of Directors of Canadian Home Economics Association, Vancouver, June, 1973.
- (4) King, Dr. Margery, "Opening Address". Paper presented at meeting of Deans and Directors of University Home Economics Programmes in Canada, Toronto, November, 1972.

the new pork as a food

By D. W. STANLEY,
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Pork has undergone a dramatic change in the last two decades. Improved breeding, production and processing techniques have resulted in "the new pork" which contains 22 per cent more protein, 57 per cent less fat and 36 per cent fewer calories than the pork of previous decades.

Contribution to the Diet

The new pork is a lean source of high quality protein. Like all meats, pork is considered a high density nutrient — being devoid of carbohydrates, it provides a high ratio of nutrients to calories and supplies vitamins and minerals.

The specific nutritive values of beef, pork and lamb are compared in the following table. The data for pork are from new pork animals — a new meat-type pig selected and bred to produce leaner cuts of meat.

Nutritive Values

	Pork	Beef	Lamb
Calories (/100 g)	310	385	390
MACRO NUTRIENTS			
Water (per cent)	50.0	45.0	44.0
Protein (per cent)	25.9	20.6	22.5
Fat (per cent)	22.8	33.3	32.1
Ash (per cent)	1.3	1.1	1.4
Carbohydrate (per cent)	0	0	0
	100	100	100
MICRO NUTRIENTS			
Calcium (mg/100 g)	11.	10.	10.
Phosphorus (mg/100g)	222.	157.	210.
Iron (mg/100 g)	2.9	2.8	2.5
Sodium (mg/100 g)	65.	65.	70.
Potassium (mg/100 g)	390.	352.	290.
Thiamine-B ₁ (mg/100 g)	0.82	0.07	0.13
Riboflavin-B ₂ (mg/100 g)	0.24	0.17	0.24
Niacin (mg/100 g)	5.0	4.4	5.1

The data in the table refer to top grade, medium fat, boneless, broiled and trimmed loin (centre cut chop, porterhouse steak, lamb chop), and were compiled from standard references. Values for the macro nutrients in pork were determined in a study conducted at the University of Guelph in 1973.

Meat not only supplies protein, but the B complex vitamins. Pork is a superb source of thiamine, and is high in riboflavin and niacin. Meat also has a good complement of important minerals such as iron.

The table gives only the total *amount* of protein present. Quality as well as quantity is important. One recognized way of assessing the quality of a protein is the protein efficiency ratio (PER). This is determined by feeding the protein in question to weaning rats as a part of a standard diet and measuring weight gain over a certain time period. Casein, the major protein in milk, is given an arbitrary value of 2.5 and PER's are corrected to this value. Lean meat, containing approximately 20 per cent protein, has a PER of about 3.0.

Another index of protein quality is the balance of the constituent amino acids. Meat provides a remarkably complete amino acid package.

Today's new pork has a place in our diets as a high nutrient-density food. Two three-ounce servings of lean, cooked pork contain the following percentages of the U.S. recommended daily allowances (RDA) for man: protein, 74; iron, 59; thiamine, 125; riboflavin, 29; niacin, 42; phosphorous, 51; vitamin B6 and B12 (pyridoxine and cobalamin), 36. This quantity of pork supplies only 15 percent of the RDA for calories.

In addition, pork is lower in saturated fats than beef and is highly digestible. Because of pork's high concentration of certain key nutrients, it is important in many special dietary regimens.

Effect of Thawing Rates on Pork Quality

With the growing popularity of home freezers and the trend to buy quantities of freezer meat, consumers should be aware of the best methods of thawing the new pork in preparation for cooking. Preliminary studies at the University of Guelph compared four types of thawing treatments on four different pork cuts. A 13-member taste panel rated the cooked pork on an ascending scale of preference. In addition, each cut was subjected to a shear test for a measurement of tenderness. Results indicate that thawing in the refrigerator or under cold running water were marginally preferable to thawing at room temperature or cooking without prior thawing.

Health Aspects of the New Pork

Cholesterol In 1964 the American Heart Association recommended reduction of fat consumption as a possible means of preventing atherosclerosis and decreasing the risk of heart attacks and strokes. Many scientists and physicians, given the data, disagreed with this recommendation. They maintained that a change in diet would be of little or no benefit.

Atherosclerosis, a condition of the blood vessels resembling corrosion of the inner surface of the arteries, can be produced in experimental animals

by feeding cholesterol. Clinical observations show a strong positive correlation between high levels of cholesterol in the blood and the occurrence of heart disease. Field work indicates that coronary disease is most common in the upper socio-economic class — a group that, among other things, consumes higher levels of animal fat.

These data led to the hypothesis that a diet high in animal fat (and thus high in cholesterol) leads to excess blood serum cholesterol, which leads to corrosion of the arteries and increases the chance that a clot will form.

It is a great over-simplification to assume that cholesterol causes heart disease. At least four other factors are antecedent to heart trouble — high blood pressure, smoking, obesity and lack of exercise. Most of these risk factors are hereditary and the best single predictor of propensity toward heart disease is past family history.

Pork, like all meats, contains cholesterol and a higher amount of saturated fat than found in plant materials. Because of this some people feel they should avoid meats. But, according to the American Heart Association, there is, at present, not sufficient proof that changes in diet will prevent heart disease. On the other hand, most experts believe that North Americans consume too much fat and should cut back on dietary fat content — following consultation with a physician. In most diets this would involve replacing whole milk with low-fat milk, decreasing solid fat intake, trimming visible fat from meat, and using polyunsaturated vegetable oil and margarine.

More knowledge of arteriosclerosis is needed before scientists can be certain that there are not factors more important than cholesterol in heart disease.

Trichinosis Of particular concern to the consumer of pork is the potential danger of *Trichinella spiralis*, a small nematode worm that causes a disease called trichinosis in humans.

Trichinosis is no longer a major problem in this country because: 1) hogs can contract this disease only by eating raw garbage, a practice no longer employed in Canada; 2) humans can contract the disease only by eating raw, inadequately cooked or improperly cured meat; and 3) the trichinosis parasite is killed by freezing as well as heat.

Whereas infection by trichinosis was a problem at one time in the pork industry, current production techniques, efficient inspection, and adequate cooking and curing have virtually eliminated the disease.

Additives Many processed meat products contain certain chemicals which improve texture and stability, fortify nutritional value and improve flavour and colour. One of the oldest uses of food additives is to retard spoilage. Smoking, pickling, salting and curing are well-established methods of using chemicals to preserve foods.

The use of additives is carefully regulated by the Health Protection Branch of the Department of National Health and Welfare. The amount of additive allowed is usually only 1/100 the amount that will produce any unusual effect in experimental animals on an equivalent weight basis.

The major use of food additives in the meat industry is for curing. The

common curing formula — a mixture of common table salt, sodium nitrate and/or sodium nitrite and sugar — restricts the growth of potential spoilage organisms in meat.

Nitrosamines In cured meats nitrosamines arise from a reaction between nitrites in the cure and certain amines (nitrogen-containing compounds in the meat). Much attention is now focused on nitrosamines because they are carcinogenic (cancer-producing) under certain conditions.

It is impossible to forbid the use of nitrates and amines. Amines occur naturally as breakdown products of nitrogenous compounds, and nitrites are essential in the manufacture of certain cured meat products because they inhibit *Clostridium botulinum*, a bacteria capable of producing a tremendously powerful toxin. At the present time reliable data on the synthesis and appearance of nitrosamine products are badly needed.

In view of this conflict, many Canadian meat packers have reduced the amounts of nitrites and nitrates to the lowest possible levels, consistent with safeguarding the product. Work is in progress to find a replacement for nitrites. Only with the proper scientific knowledge can we evaluate the extent of this hazard and formulate the proper response.

The preceeding article is taken from material by Dr. Stanley and Dr. Osborne which will appear in the forthcoming reference textbook on pork, published under the auspices of the Ontario Pork Producers Marketing Board.

1974 C.H.E.A. PRE-CONVENTION WORKSHOP

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JULY 3-5, 1974

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A STUDY OF RETAIL EGG QUALITY¹

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Mrs. Sheila McFadyen graduated in Agriculture and received a Master of Science in Foods from the University of Alberta. She holds the position of professional agriculturist working as a consumer marketing officer for the Alberta Department of Agriculture.

Introduction

Studies by the U.S. Department of Agriculture (Dawson, Miller, and Redstrom, 1956), indicated that quality, price, and size were the three criteria considered by consumers when purchasing eggs. In Canada, eggs are graded on the basis of size, shell condition (cleanliness and general appearance), and interior quality. Interior quality includes the position, movement, size, shape and prominence of the yolk shadow, size of the air cell, condition of the albumen, and the presence of any germ development, or abnormalities, such as blood and meat spots, as determined by candling (Orr, 1967). These grading judgements are based on the characteristics of the intact egg, which are inefficient measures of interior quality (Stewart, Gans and Sharp, 1933).

Other bases of quality judgement include: egg flavour and performance in cake making. Both of these qualities vary directly with candled grade (Dawson *et al.*, 1956). More accurate measures of interior quality according to Dawson and co-workers, include: the yolk index (height of the yolk divided by its width); albumen index (height of thick albumen divided by its width); the Haugh unit (logarithm of the height of the thick albumen, multiplied by 100, and adjusted to the equivalent value for a two ounce egg); and the Van Wagenen score (appearance of the egg albumen, compared with a set of numbered pictures of eggs with different degrees of albumen firmness). These methods are impractical for use in routine grading, but are useful for quality improvement and control programs (Kilpatrick, Brant and Shrader 1958). Other criteria of egg quality that cannot be used in routine grading include: albumen pH, foam stability, and angel food cake volume.

The authors were conscious of considerable consumer criticism of the quality of eggs on the retail market, and therefore decided to study the quality of eggs offered for sale at retail stores in the Edmonton area.

Materials and Methods

Samples:

Grade A large eggs were purchased from different supermarkets in Edmonton. A carton of eggs was randomly selected from the centre of the egg display. All of the commercial egg display cases were refrigerated, but they were frequently overloaded.

Measurements:

The following measurements were made on each of the eggs in the samples: weight, candled grade and Haugh units (Brant, Otte, and Norris, 1951). A composite of the albumen from a dozen eggs was used to determine: albumen pH (Beckman zeromatic pH meter, 20°C), foam stability and angel food cake volume. A 122 ml aliquot of the egg albumen was used to make the angel food cakes, and the balance of the albumen was used to determine foam stability, according to the method of McLaren and Stadelman (1954). The angel food cakes were made according to a standardized formula developed in the test kitchen (School of Household Economics). The 150 g of batter was divided evenly between 2 loaf pans (7½" x 3¾" x 2¼"). The cakes were baked at 375° F for 30 min., cooled and their volume determined by the seed displacement method (Binnington and Geddes, 1938).

These data were used to check egg grades against the Canada Department of Agriculture grade regulations for shell eggs (Canada Agricultural Products Standards Act. Shell Egg Regulations, 1968). They were compared to standard curves for graded, fresh eggs that had been stored under controlled conditions.

Standard Curves:

The standard curves for air cell size, Haugh units, pH, cake volume and foam stability were determined on fresh eggs (obtained from the University of Alberta, Poultry Science Department) from chickens on a standard maintenance ration. The eggs were candled and selected for grade A large. They were separated into 3 groups and stored at 40, 50 and 60°F in dessicators, over NH₄Cl to give 79% relative humidity (Perry, 1963). Replicate, eight-egg samples were withdrawn on 3 successive days, for each storage temperature, at weekly intervals, for 6 weeks. These samples were then subjected to the same 5 specified quality measures as the samples purchased from the supermarkets.

Results and Discussion

The standard curves obtained from the eggs held under controlled storage are shown in Figures 1 to 5. For air cell size, Haugh units and albumen pH an initial rapid change occurred, followed by a slower rate of change. In general, deterioration was more rapid at 60°F than at 40°F. In Figure 1, the line for the 4.8 mm (3/16") maximum air cell size allowable for grade A eggs is shown. From Figure 1, it may be seen that for the eggs stored at 60°F, the grade A "shelf life" was less than 2 weeks, at 50°F it was 2 weeks and at 40°F it was 2½ weeks.

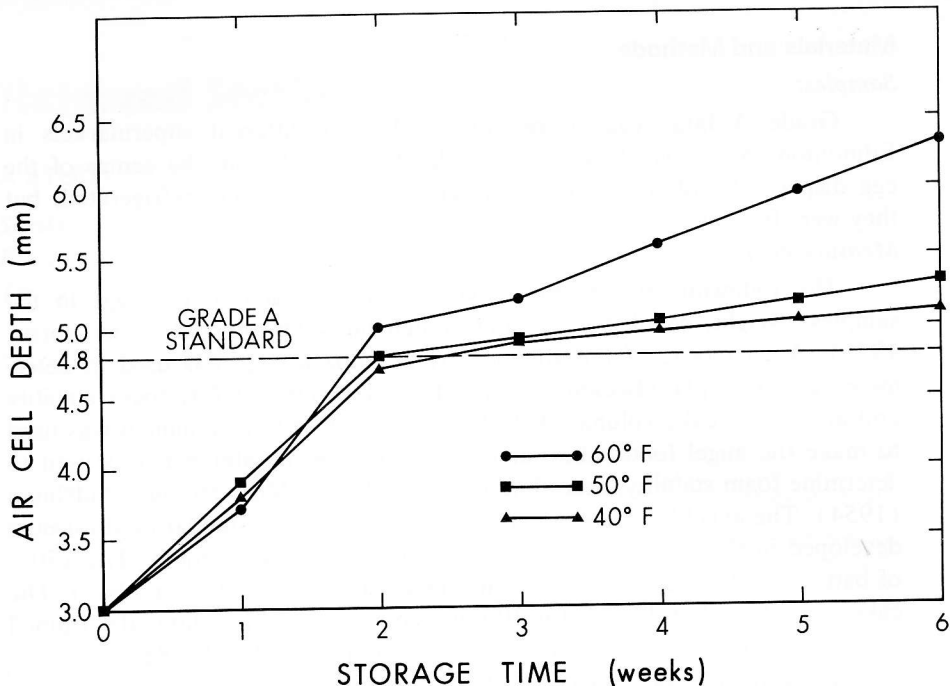


Figure 1. Increase in air cell size of eggs with storage time at different storage temperatures and at constant humidity.

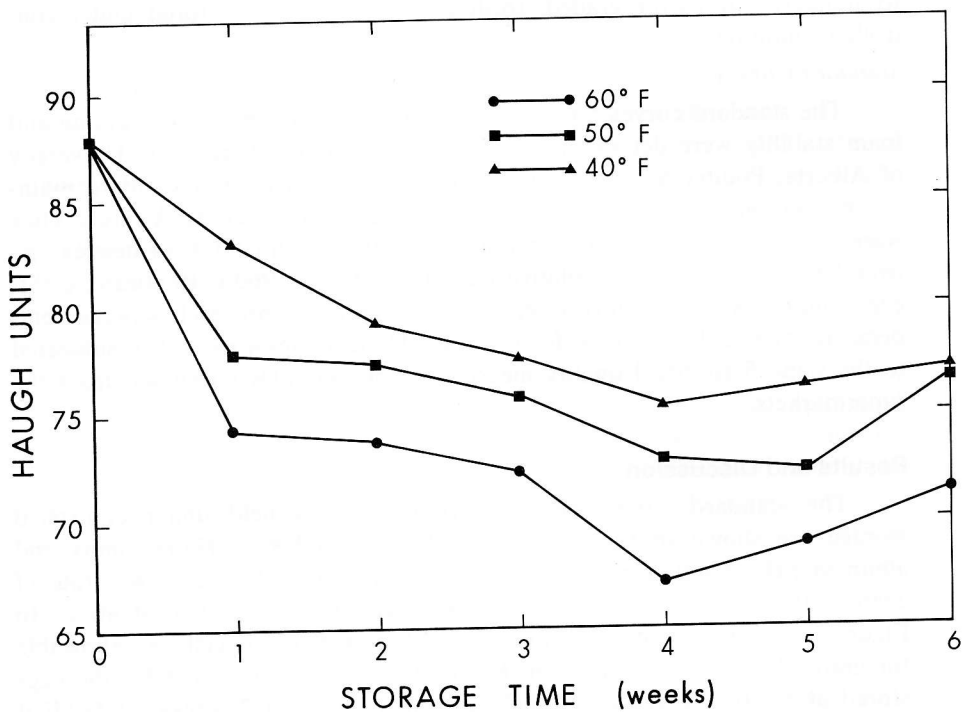


Figure 2. Change in Haugh unit value of eggs with storage time at different storage temperatures.

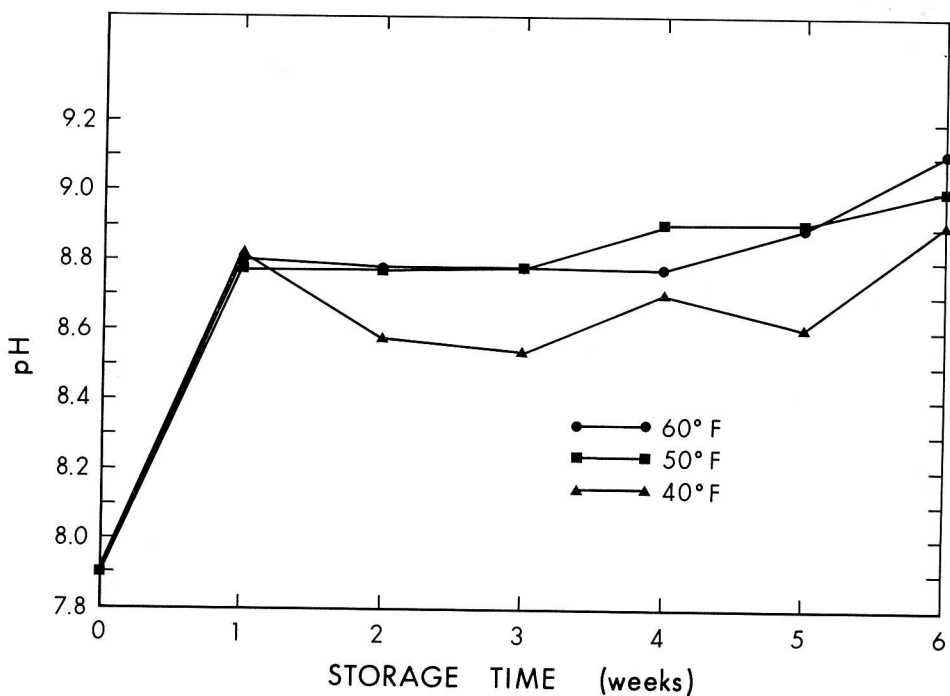


Figure 3. Change in albumen pH of eggs with storage time at different storage temperatures.

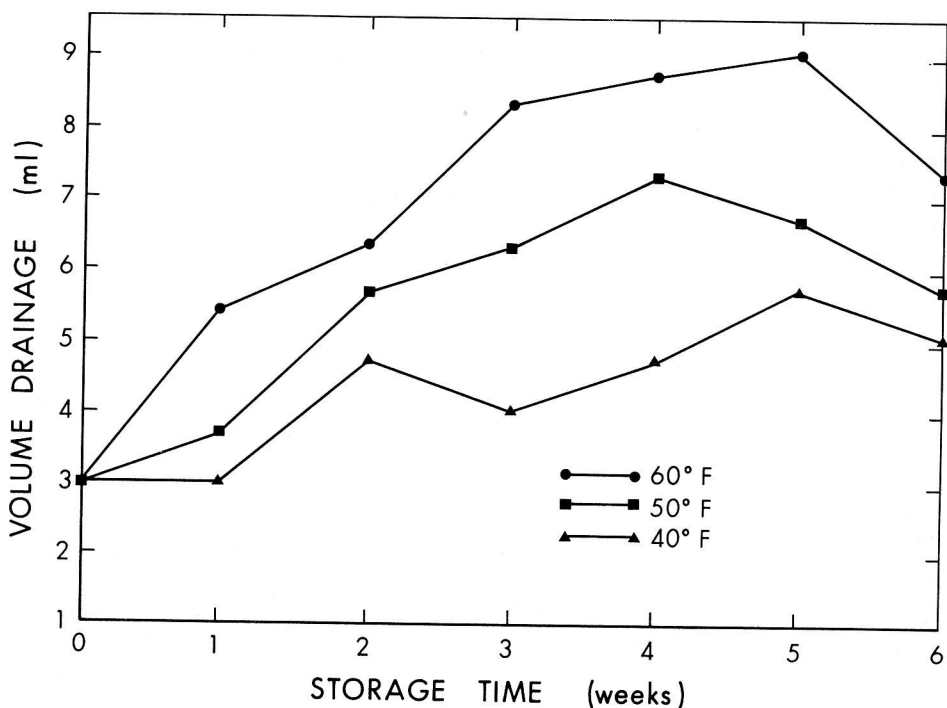


Figure 4. Change in foam stability of whipped egg whites with storage time at different storage temperatures.

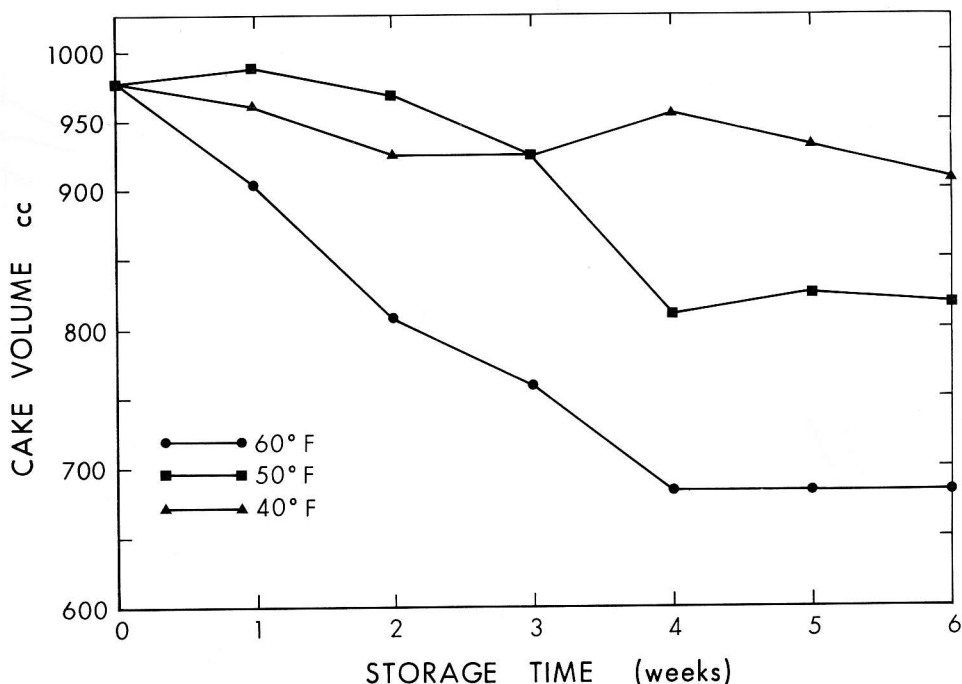


Figure 5. Change in angel food cake volume made with egg whites from eggs stored for varying times at different storage temperatures.

Correlations between these 5 measures of egg quality were highly significant, for all storage conditions, except for cake volume and albumen pH at 40°F. The correlation coefficients are given in Table 1. Any of these measures may be used as a reliable indicator of egg quality, in terms of length of storage, except for foam stability, cake volume and albumen pH at 40°F. The values for Haugh units, foam stability, cake volume and albumen pH at which the eggs fell below grade A standards are shown in Table 2.

Table 1. Correlations between the five measures of egg quality for each storage temperature.

	Haugh	Foam Stability	Volume	pH
40 F				
Air Cell	-.98**	+.92**	-.14	+.71**
Haugh		-.91**	-.02	-.74**
Foam			-.14	+.15
Volume				+.15
50 F				
Air Cell	-.89**	+.90**	-.85**	+.87**
Haugh		-.87**	+.77**	-.92**
Foam			-.85**	+.72**
Volume				-.83**
60 F				
Air Cell	-.85**	+.88**	-.94**	+.85**
Haugh		-.95**	+.97**	-.84**
Foam			-.94**	+.78**
Volume				-.92**

** Significant at the 1% level.

From the analyses of variance for temperature and length of storage for each parameter of quality, the levels of significance for these data were obtained (see Table 3). Only albumen pH gave a nonsignificant result for this measure with time of storage.

Table 2. Levels for each of the quality measures corresponding to 4.8 mm air cell size (maximum air cell size acceptable for Grade A eggs)

Storage	Haugh	Foam Stability (ml)	Cake Volume (cc)	pH
2½ wks. at 40 F	78.5	4.4*	925*	8.55*
2 wks. at 50 F	77.5	5.7	965	8.78
1½ wks. at 60 F	74.0	5.9	875	8.79

* correlations not significant with air cell size.

Table 3. F test for significance of the quality measures with temperature and time of storage.

Factors	Air Cell	Haugh units	Foam Stability (F ratio and significance)	Cake Volume	Albumen pH
Replicates	2.44	2.4	2.18	0.43	1.40
Temperature	5.13*	38.9**	35.18**	30.65**	5.61**
Weeks	17.88**	11.6**	8.32**	7.44**	2.46
Temperature x Weeks	0.50	1.4	0.07	1.18	0.06
* 5%					
** 1%					

level of significance

Tests were done on grade A large eggs purchased at retail outlets on 4 occasions. The 36 samples were obtained from 21 different supermarkets, including some duplicates. A sample of each brand was taken from a supermarket where the store carried two brands of grade A large eggs. The prices were noted for each sample. A sample of fresh, grade A large eggs from the University of Alberta, Poultry Science Department was used as a reference control for each set of samplings.

Of the 36 dozen samples tested, 12 were below all of the minimum grade A equivalents given in Table 2, 26 were below these values in 4 out of 5 qualities. None of the commercial samples were of grade A quality for all 5 measures. Although the grading regulations do not require than an egg be undergraded, based on air cell size alone, the data for the five quality measures of the eggs studied indicated that the majority of the eggs were not meeting the quality standard implied by the grade. The data for Haugh units gave a second parameter for judging egg quality frequently referred to in egg grading studies. Based on the maximum air cell size of 4.8 mm, and the minimum Haugh unit reading of 66 quoted by Snyder (1961) for grade A quality eggs, 7 doz. out of the 36 doz. eggs, and 32% of the eggs were below grade A quality. One of the noticeable factors about the samples of eggs was the great variation of air cell size, and the other quality characteristics, within a sample of one dozen eggs.

Table 4. Quality measurements of retail eggs purchased from retail stores in Edmonton.

Batch	Sample	Price Cents/Doz	Air Cell (mm)	Haugh units	Foam Drainage (ml)	Cake Volume (cc)	pH
I	A	63	5.9	74	4	960	9.1
	B	59	4.5	77	3	845	9.0
	C	63	6.8	70	5	810	9.0
	D	63	6.9	65	3	935	9.1
	E	62	5.6	71	5	900	9.3
	F	63	6.0	70	5	845	9.1
	G	64	4.6	72	2	835	9.0
	H	68	5.4	82	3	970	8.9
	I	69	6.6	73	2	945	8.9
	Fresh	—	3.8	85	2	960	8.6
II	A	59	6.6	74	6	870	9.3
	B	68	6.4	78	8	935	9.3
	C	59	5.9	69	9	870	8.6
	D	59	6.7	67	6	870	9.1
	E	56	5.8	71	5	925	9.2
	F	73	7.5	70	7	895	9.3
	G	59	5.6	68	6	930	9.2
	H	64	7.1	68	6	865	9.3
	I	64	6.8	72	5	940	9.3
	Fresh	—	3.1	85	3	982	8.6
III	A	61	6.6	69	6	885	9.5
	B	59	6.9	66	4	815	9.2
	C	59	7.0	60	7	805	9.2
	D	63	7.9	79	8	820	9.1
	E	64	7.8	63	6	870	9.2
	F	61	5.3	74	8	885	8.6
	G	59	7.1	70	7	872	9.3
	H	56	5.1	74	5	1020	9.2
	I	56	7.1	63	6	860	9.3
	Fresh	—	3.1	84	3	1000	8.4
IV	A	52	4.3	66	5	760	9.4
	B	56	4.5	67	5	875	8.9
	C	49	5.0	68	6	960	9.4
	D	52	5.2	66	6	825	9.3
	E	49	5.4	71	6	840	9.6
	F	52	6.8	61	8	755	9.5
	G	55	4.2	68	7	885	9.3
	H	52	4.9	72	6	890	9.5
	I	51	4.1	68	5	785	9.5
	Fresh	—	2.1	76	4	1050	8.5

Assuming that these eggs had been stored, as recommended by the Canada Department of Agriculture (Orr, 1967), at 50-55°F and at a relative humidity of 70-80%, the approximate age of the eggs offered for sale could be rated, using the data for 50°F in Figures 1-5. From the data in Table 4, and the quality measure changes for 50°F storage in the Figures, the "age" of the eggs purchased from the retail stores was estimated.

The majority of the retail samples were of a quality equivalent to eggs stored at 50°F for at least 5 weeks. The apparent age of the eggs may be due to improper storage, in which case the actual length of storage may have been considerably less than 5 weeks. However, consumers are purchasing eggs of poorer quality than they might reasonably expect. Furthermore, eggs that have deteriorated below grade A, are being sold as grade A.

The prices charged for these grade A large eggs ranged from 49 to 73¢ per dozen. The correlation between cost/dozen and air cell size was +0.05,

ie. there was no relationship between quality and price. Within one supermarket, with two brands of grade A large eggs, the quality of the more expensive brand may be poorer than the quality of the cheaper brand.

Canada grading regulations specify that grade A large eggs should weigh at least 2 oz. At the retail store, the regulations allow that 16 eggs out of 15 doz undergrade eggs may be below weight, provided they are not below the weight standard for the next lower grade. This allows for 0 to 8.9% of undergrade eggs to be underweight. In this study, 9.0% of the retail eggs were found to be underweight. This indicates that eggs at the retail level are just meeting the minimum standards.

Conclusions

The quality of eggs in the retail marketplace is frequently such that the consumer is dissatisfied with the product. This study indicated that the eggs were the *equivalent* of at least 5 weeks old, if they had been stored as recommended by the Canada Department of Agriculture.

With the marketing facilities in Alberta, and the short distances between production and consumption, eggs of better quality should be available on the market. The study indicated that better handling and improved marketing techniques are required to assure consumers of a good quality product in the market place. Grade A eggs are frequently below grade standards, with price not related to quality.

From this study it is apparent that the marketing of eggs is aimed at the minimum requirements for grade standards. Although this would appear to be economically sound for the producers, this might only be the case in the short term. Present marketing attitudes would appear to be based on the absence of negative qualities, rather than the presence of positive qualities.

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Etude de la qualité des oeufs au Marché de détail Résumé

Des oeufs frais, entreposés à des températures de 40, 50 et 60°F. et à une humidité relative de 79% durant une période de 6 semaines ont été évalués objectivement pour les variables suivantes: la grandeur de leur chambre d'air les unités Haugh, la stabilité de leur mousse, le volume des gâteaux des anges préparés avec les blancs ainsi que le pH. Il a été observé que la grandeur de la chambre d'air était en corrélation statistiquement significative avec chacune des mesures de la qualité des oeufs, sauf celle du volume des gâteaux des anges préparés avec des oeufs réfrigérés à 40°F. ($r = -0.14$). À partir de ces résultats, des limites de grandeur de la chambre d'air ont été déterminées pour des gros oeufs catégorie A. Les 5 mesures de la qualité des oeufs furent aussi effectuées sur des oeufs de mêmes caractéristiques (gros, catégorie A) provenant des épiceries de détail d'Edmonton. Des 36 douzaines analysées, une douzaine seulement pouvait être classée dans la catégorie A au point de vue des 5 variables; 26 douzaines furent évaluées inférieures à la catégorie A sur 4 des 5 variables.

On peut dire que la majorité des oeufs offerts pour la vente au détail avaient, au temps de l'étude, une qualité équivalente à 5 semaines d'entreposage à une température de 50 - 55°F. et à une humidité relative de 70 - 80%; de plus, le prix de vente de ces oeufs n'était pas proportionnel à leur qualité.

SCHOOL OF HOME ECONOMICS UNIVERSITY OF BRITISH COLUMBIA

is looking for a Director. Established scholar with administrative experience or potential required. PhD in related discipline preferable. The School, a part of the Faculty of Arts, has two divisions, Family Sciences and Human Nutrition, offering three undergraduate programmes (general, foods and nutrition, and an honours programme in nutrition) and master's and doctoral programmes in nutrition. Some programme development anticipated. Salary negotiable, excellent fringe benefits. Enquiries and curriculum vita to:

**Dr. Robert M. Will, Assistant Dean
Faculty of Arts
University of British Columbia
Vancouver 8, B.C.**

THE NEW, LEAN PORK

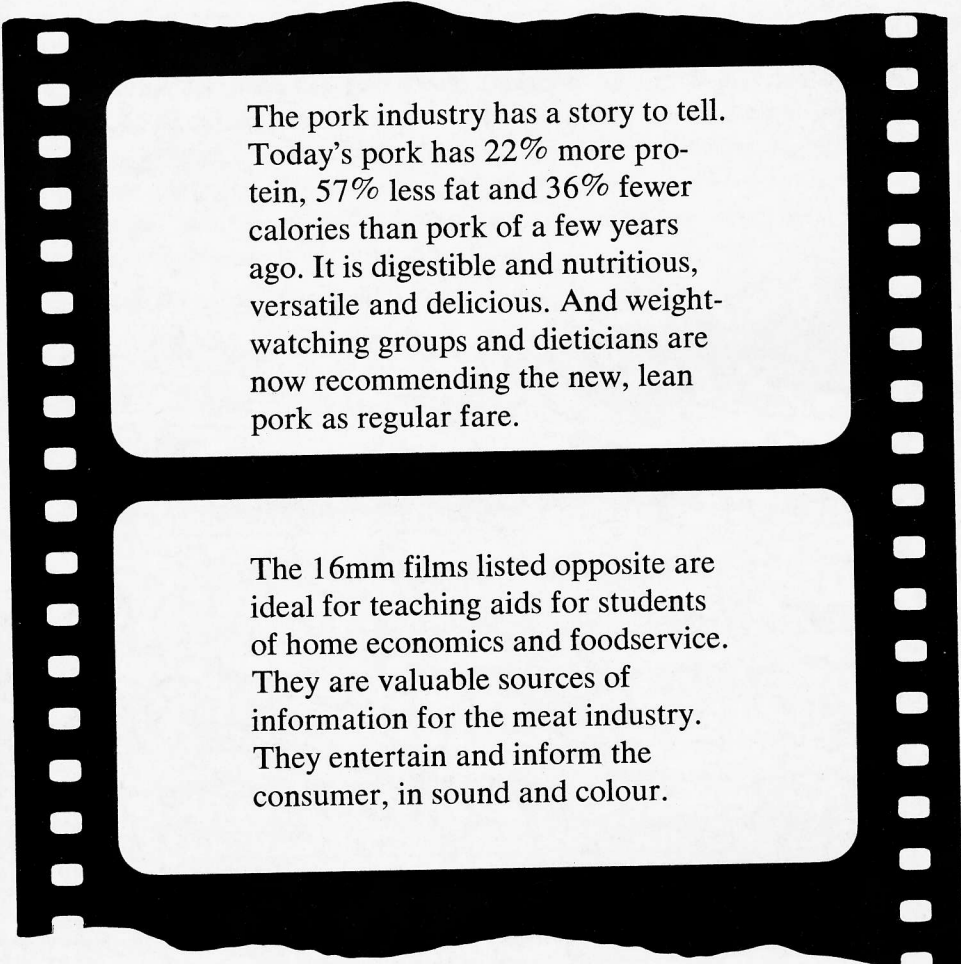
Entertaining Education Films

To Help Tell The Nutrition Story



NEW — As Teaching Aids

**NEW — For Consumer Information
and Entertainment**



The pork industry has a story to tell. Today's pork has 22% more protein, 57% less fat and 36% fewer calories than pork of a few years ago. It is digestible and nutritious, versatile and delicious. And weight-watching groups and dieticians are now recommending the new, lean pork as regular fare.

The 16mm films listed opposite are ideal for teaching aids for students of home economics and foodservice. They are valuable sources of information for the meat industry. They entertain and inform the consumer, in sound and colour.

Please note that accompanying the film "Pork Perfect Pork" are recipe booklets for audience distribution. The booklet outlines in detail the interesting pork dishes shown in the film, the recipes of Majorie Elwood, former food editor and widely-known home economist and food consultant. When ordering, please specify number in audience or classroom.

Pork Perfect Pork

A fine information film combining the development of the new lean pork in Canada with the preparation of appetizing pork dishes. A new production of the Ontario Pork Institute, it comes with an accompanying recipe folder. (Please state number required)

14 minutes, colour, 16mm

Pork — An American Tradition

Ralston-Purina's bright contribution to the new pork story. This film deals with today's delicious lean pork and their Home Economist discusses and demonstrates the variety of ways it can be served.

15 minutes, colour, 16mm

Pork With the Gourmet Touch

A culinary tour of the Ports of Call dining rooms of the Toronto restaurant complex. Gourmet treats for the eye as well as the palate.

Prepared by Agriculture Canada.

15 minutes, colour, 16mm

Facts About the New Pork

Pork — nutritious as well as delicious — is the message from this film prepared by the Chicago head office of the National Livestock and Meat Board. Medical spokesmen support the new lean product; pork dishes demonstrate its versatility.

17 minutes, colour, 16mm

For Reservations

These films may be borrowed in Ontario by writing to: Films, Ontario Pork Institute, P.O. Box 69, Mississauga, Ontario, L5A 2Y9.

Out of Ontario: The Secretary, Canadian Pork Council, 111 Sparks Street, Ottawa K1P 5B5

Please allow three weeks prior notice and, when possible, alternative dates.

Other Teaching Aids are available from the Ontario Pork Institute

- Classroom wall posters featuring favourite dishes
- Colour charts featuring pork cuts
- Pamphlet: "Pork — An Important Lesson in Nutrition"
- Recipe booklets and Cookbookmarks
- Booklet: "Pork in the Foodservice Industry"
- A major textbook for classroom and research use is shortly to be published, covering all aspects of pork from farm production to dining table. This book will be made available to teachers, and three-ring binder sheets of the highlights will be supplied to students. Those interested in the book should write Ontario Pork Institute; you will be advised further concerning publishing date, etc.

Happenings

THE SILVER JUBILEE SCHOLARSHIP — \$2,000

(CHEA Scholarship Fund Award)

For a graduate in Home Economics from a Canadian university who is a resident of Canada and who is planning to undertake, or who is at present engaged in, graduate study proceeding to a higher academic degree.

— *Won by*

Miss Susan Bain
R.R. #3
Stratford, Ontario

Susan Bain is a 1972 graduate of the University of Guelph with a Bachelor of Science in Early Childhood Education.

She has spent the past year as a graduate student under a project between the University of Guelph and the Department of Home Science, University of Ghana, doing the course work for her master's degree in Canada and collecting data on a sample of families in Ghana.

She will return to Guelph this fall and hopes to complete her master's program in family studies next year.

THE CARNATION COMPANY INCENTIVE AWARD (1973)—\$450 (Presented by the Carnation Company Limited)

For a graduate in Home Economics (or in a closely allied discipline) from a Canadian university who is planning to undertake graduate study proceeding to a higher academic degree. Special

consideration will be given to a student undertaking post graduate study in foods or in food science. The award will be made on the basis of academic standing, financial need and an interest in subsequent employment in industry.

— *Won by*

Mrs. Elizabeth Johnson
P.O. Box 1115
Wolfville, Nova Scotia

Elizabeth MacLeod Johnson graduated from Acadia University in 1968 and received her M.S. (Nutrition) from Cornell University in 1970.

Since 1970 she has been a lecturer in nutrition at Acadia.

She plans to enter the Ph.D. programme at the University of British Columbia and will do her research in the area of maternal and infant nutrition.

DR. ELIZABETH FENIAK HONOURED

Dr. Elizabeth Feniak, Professor and Associate Dean, Faculty of Home Economics, University of Manitoba, was honoured April 24, 1973 by the Manitoba Home Economics Association at its Annual Meeting. The honour award, honorary life membership, was presented to Dr. Feniak for her outstanding contribution to the profession, and as a professional home economist to the quality of community life.

Dr. Feniak is presently president of the Manitoba Action Committee on

the Status of Women; a member of the Executive Committee, Provincial Council of Women; a member of the board, Manitoba Women's Institute; Canadian representative on the International Committee of Dietetics; chairman of the CHEA Executive Director feasibility study; and International Federation of Home Economics liaison representative on the Manitoba Home Economics Association executive.

Dr. Feniak was selected in 1972 by Mount Allison University as consultant on the feasibility of establishing a Family Studies programme there.

She has previously served as chairman of Canadian University Teachers of Home Economics 1969-71, as board member of the Home Welfare Association of Winnipeg and Meals-on-Wheels Committee 1965-69, and as member of the Canadian Council of Nutrition from 1963-69.

IS THERE A EUTHENIST IN THE HOUSE?

Now that the self-examination process of Home Economics Programmes has been refocused on changing the IMAGE rather than the NAME, we can fantasize with a term that virtually *no one* will understand . . . "Euthenics" is defined as being "a science that deals with the development of human well-being by the improvement of living conditions". Aside from its obscurity, this name for our profession might have some potential . . .

As it is a science, it is consistent with the perspective used for research in the natural and social sciences from which we draw. The selection of "logy"s that are a part of Home Economics curricula are familiar to all of us: Biology, Physiology, Psychology, Sociology etc.

In that the term implies the application of knowledge for a purpose, it carries the "mission" orientation of Home Economics as well. In contrast to the "ivory tower" or disciplinary approach of the pure sciences, this focus on human living conditions is incorporated into academic curricula by "Studies". They are interdisciplinary courses and have as their core the human issues of the "real" world.

With both science and mission perspectives, it is inevitable that the *role* of Home Economics will continually change. It is really a sign of adaptation or maturity that we are ceasing to be concerned with our "handle" . . . but doesn't the idea of being a "euthenist" sound intriguing?

*Jennifer Welsh,
Ryerson Polytechnical Institute,
Toronto*

SCHOLARSHIP IN MEMORY OF NORAH HALCOMB

The Food Science Department of McGill University has established an entrance Scholarship into Home Economics Education in memory of Mrs. Norah (Pat) Halcomb.

A goal of \$2,000. has been set and the fund currently stands at \$943.

Anyone wishing to send a private donation should forward it to:

School of Food Science,
Macdonald College of McGill
University,
Box 285,
St. Anne de Bellevue,
Quebec.

Please make checks payable to McGill University.

1974 CONVENTION

It's all happening on the West Coast in '74.

Plan now to make an investment in our future by becoming involved in GATEWAY '74 — L'HORIZON at Vancouver, B.C., July 7-11, 1974.

Members passing through GATEWAY '74 — L'HORIZON will be encouraged through speeches, workshops and debates to scrutinize their total environment both as individuals and professionals; and with commitment and persistence prepare to take a stand on issues designed to affect their wellbeing. How well will we measure up to metrication? GATEWAY '74 — L'HORIZON plans to avoid a total communication crisis.

We hope you will become involved with us at GATEWAY '74 — L'HORIZON C.H.E.A. Convention, Vancouver, B.C.

The committee invites:

- technical papers
- company exhibits

Those interested should contact Pat Stearman, Secretary, at 6370 Fremlin St., Vancouver, B.C.

"B.C.-ing" You!

A.C.H.E.S. CONVENTION OCTOBER 17-20, 1973 GUELPH

Women's Liberation and the rapidly expanding scope of the field of Home Economics have been around and talked about for several years. The mention of either topic merely brings groans because everyone seems to feel that they have heard all of the arguments,

all of the angles and all of the "brand new" ideas. Not too many people seem convinced that changes have taken place. However, in order to bring about change we must present a new product, a new image, a new reality to people, who will then adjust their perceptions and acknowledge the change.

We, as Home Economics students, must take the initiative and demonstrate leadership in order to accomplish change. We have to prove that we are a new breed of Home Economists, and of women if we expect others to realize it.

At the 1973 A.C.H.E.S. Convention, we hope to prove that students in the broad field of Home Economics have many specialized skills which they are demonstrating in cooperation with other students and with professionals in the community. Team work is becoming increasingly important in our very specialized society and as students we need to learn to share our skills with others as well as accept the help of other specialists in accomplishing a common goal. Field placements, research and summer jobs provide valuable experience in the team approach.

One of the highlights of the convention will be a field trip to MacMaster Medical Centre in Hamilton. There will be something for everyone interested in nutrition and food, child care facilities, family services, as well as new materials and design ideas in the actual physical environment of the centre. Student research and placements have been carried out there and teamwork seems to be the principal theme.

The 1973 Convention Committee feels very strongly that Home Economics students themselves have developed very original and diverse interpretations of what their place is, what

their skills should be and how they want to fit in to the world outside the college. By encouraging student ideas, student research, issues that students consider important in their field and comments and criticisms on Home Economics education we hope to capitalize on our own resources and make this convention stimulating and exciting for everyone.

MEMBERSHIP DRIVE

To have C.H.E.A. become more representative of our profession and to become more active on our behalf a motion has been presented to appoint an Executive Director for a term of 2 years, 1974-1976. To support this motion, your help is needed in recruiting new members.

The future of C.H.E.A. depends on you!

INFLATION

This has hit the Journal also.

The cost of this publication will be \$8.00 per year or \$2.00 per issue, however this is included in membership fees.

CONFERENCE ON NUTRITION

- Oct. 19 and 20, 1973 Québec City
- Centre de Recherches en Nutrition de l'Université Laval
- connaissances en nutrition applicables aux conditions de vie au Québec
- ateliers de travail
- tout les aspects de la nutrition

CIRCLE THESE DATES

October 17 — 20, 1973

ACHES — conference-Guelph University

July 7 — 12, 1974

CHEA — convention-Vancouver
1976 — International Federation of Home Economists — Congress — Ottawa.

DEADLINES FOR INPUT FOR THE JOURNAL

January — November 10,
April — February 10,
July — May 10,

On conference years the Journal is published in June, so deadline is April 10,
October — August 10.

TEACH HOME ECONOMICS WITH CUSO OVERSEAS

Commencing January and August 1974, degree and diploma-holding Home Economics teachers are needed to work for two years under contract in East and Central Africa, the South Pacific, and the Caribbean. Salaries paid at the local level in the country of assignment. Interest on Canada Student Loans, life and disability insurance, medical and dental coverage will be provided. Contact the CUSO Committee on your campus for more information or write:

Recruitment Department, CUSO
151 Slater Street,
Ottawa, Ontario K1P 5H5

Abstracts of Current Literature

Prepared by the staff of the Home Economics Department of Mount St. Vincent University, Halifax, Nova Scotia

Commitment to creativity in education?

E. Paul Torrance

Spring 1973

McGill Journal of Education, Vol. VIII, No. 1, 3-12.

Throughout Canada and the United States it is generally held that human beings have the right to the optimum development of their potentialities, interests, goals, percepts and assets. In order to give more active support to this belief we must be willing to support and promote a more creative kind of education. Although this is generally recognized there has been little sustained support for educational ventures that support creativity.

Research during the sixties supported the concept of multi-giftedness rather than a single type of giftedness. Highly intelligent children are not necessarily highly creative and vice versa. With present knowledge about measuring and fostering multiple talents, teachers must sharpen their abilities to cultivate these talents.

When teachers can create an atmosphere where assignments, instructions and conditions set in motion the creative thinking processes the resulting built-in motivation is such that the application and re-application of imposed rewards and punishments which are common in the school today, become unnecessary.

Bold and imaginative ideas are necessary to implement a more creative kind of education. Two changes which seem essential are:

1. Respect for individuality and acknowledgement of creative potentialities.
2. Provision of open-ended curricula, open-ended instructional methods and open-ended relationships.

Because many people have given up hope of attaining a creative education through established schools, there is evidence of action occurring on various fronts:

1. Within families.
2. Within communities — store front schools, daycare centres, church and community agencies.
3. Through reform and in-service education in established schools.

The Des Moines (Iowa) Public School System reports some amazing changes in teacher behaviour and in the creative development of children as a result of a mammoth and intensive programme of in-service education. In his National Schools Project, Frank E. Williams reports some very promising work in several schools in New York, Illinois, Oregon, California and Minnesota. These and other studies give us some reason for hope but it would

seem that such efforts must be far more widespread and intensive before we can expect much sustained effort.

Symposium: Effects of processing, storage, and handling on nutrient retention in foods.

(1) D. B. Lund; (2) T.P. Labuzda; (3) G. E. Livingston, C. Y. W. Ang and C. M. Chang; (4) P. A. Lachance, A. S. Ranadive and J. Matos.

1973

Food Technology 27:16-38

and

Tables of food composition: availability, uses, and limitations.

E. W. Murphy, B. K. Watt and R. L. Rizek

1973

Food Technology 27:40

The proliferation of new and modified foodstuffs on the market, and the lack of ready data from commercial companies, has led to concern on the part of the consumer and the professional nutritionist about the gaps in our knowledge regarding the nutrient content of market products, as purchased and as handled.

Both articles attempt to define the adequacy of food composition data under varying conditions, and the kinds of research needs that must be met. In the Symposium, four major articles are presented on the effects on nutrients of heat processing, of dehydration and storage, of food service handling, and of reheating convenience foods.

Recent developments in *heat processing* show that the optimal thermal process, occurring when optimal heat destroys lethal organisms yet allows for optimal nutrient retention, is a function of activation energy, rate of degradation of the foodstuff, thermal death time of the organisms and reduction time at a reference temperature. Computer programs have been developed utilizing certain of these values for the heat labile nutrient. However, to optimize nutrient retention, kinetic data should be available to describe the nutrient retention with time and these are lacking at present. The four parameters described will allow the development of such data. However, it should be borne in mind that optimization is not the same for all nutrients, thus the most important nutrient should be studied.

The needs of the *dehydration process* are similar to heat processing. This process is unique in that deteriorative reactions occur in a low moisture environment. To predict deterioration and nutrient destruction, kinetic data is required as a function of moisture content, temperature and oxygen concentration, as well as a knowledge of the time-temperature-moisture distribution in a food undergoing drying. Computer solutions to optimize nutritional value can be found which will provide the proper programme for air temperature and humidity to use in drying. From this, shelf life can be predicted and thus a suitable choice of packaging film for storage.

The third paper on *food service handling* points out how little attention has been paid to procedures by which food is obtained for service in a large institutions. The paper traces the sequence of events through which food is carried from its receipt to its service, and the procedures which would affect nutrient retention, e.g. storage time and temperature, thawing, batch size prepared, holding times of foods at chilling and at warming temperatures, and ingredient substitution of special diet products. Since losses for vitamin C during food preparation can vary from 0—94%, for thiamine, from 4—72%, and for riboflavin, from 8—77%, there is a need for monitoring the nutritional value of foodstuffs prepared in these systems.

No allowance has been made in food composition table (handbook) data for losses due to *reheating processed foods*. Experiments were carried out using canned and frozen corn, green beans and peas under different conditions. Nutritive values for vitamin C and thiamine were always lower than handbook data; and while vitamin C was more affected than thiamine by reheating, reducing to almost zero, thiamine was more affected than vitamin C by holding, especially in an uncovered container. Results indicate a very poor knowledge of nutritive losses during processing, handling and storage. The most efficient solution would be “nutrification of processed food items to assure expected levels of micronutrients . . .” Research is needed to determine the best of many approaches before any one is implemented.

As if in answer to this set of articles, and especially the last, the second paper evaluates the *food composition tables* to which nutritionists have access. Much valuable information includes a listing of the tables available, their source of data, the computerized data available and where to obtain publications. Handbook #8, the most widely used of all the tables, is in the process of being revised and will contain more foods and more nutrients than at present.

These five articles are invaluable in evaluating the status and usefulness of our information on the nutrient content of foods. The articles have pinpointed the complexities of deriving reliable, useful information in this area and the detailed work that lies ahead. Our present handbook data must still be used to fill the gap.

Why durable press is failing.

172

Textile World, 122(10):103-113

Durable press, despite their no-ironing and easy-cleaning characteristics, falls short of consumer's expectations. This applies to the present polyester-cotton blends, as well as the 100 per cent cellulose. Basic reasons for decrease in appeal are:

(1) Fashion and Styling Trends:

Today's demands tend toward (a) all-cotton fabrics with no resin finish as this offers more comfort and longer wear life; (b) polyester knits and textured woven polyester fabrics; (c) a “mussed-look” fad among teenagers.

(2) Technology:

There is still no practical solution to strength loss in cellulose during the finishing process. The use of polyester, while overcoming strength loss in cellulosic fabrics, added a new problem of differential abrasion in the blends which caused frosting or rapid wearing away for the cellulose. Anti-frost additives, while aiding this problem, produce undesirable effects on the fabric hand and drape.

Other problems include discoloration of whites, persistent odors due to the resins used, and stiffness of fabric. Modified resins are less effective, therefore, finishers today have resorted to blending resins, changing fibre content, redesigning fabric construction, using special processing procedures and researching new polymer development.

Although durable press is on demand in the uniform business, its future in other textile areas depends upon successful research developments to alter existing problems.

Attitudes toward parenthood among Canadian young people

C. W. Hobart

1973

Journal of Marriage and the Family, 35:71

The author has attempted to determine whether developments of the last decade have influenced the attitudes of young people toward parenthood. He has predicted that rural residence, high religiosity and low SES (socio-economic status) would be associated with the following: 1) preference for large family size, 2) rejection of contraception, 3) authoritarian attitudes toward child-rearing, 4) preference for traditional allocation of parental responsibilities, and 5) rejection of divorce.

The subjects studied were students from both English and French universities and trade schools. They filled out two marital role expectation inventories and a parent-child attitude role. The latter determined the respondent's conceptions of appropriate childrearing goals and techniques.

French-speaking students were found to be consistently more traditional than English-speaking students. The former tended to ascribe more responsibility to women as regards childrearing, and tended to see the role of the man as more narrowly breadwinner and disciplinarian. They were also less permissive. There was a high level of acceptance of divorce of parents among members of both language samples, also both showed a preference for a medium-sized family. The French Canadian students expressed more traditional attitudes toward birth control, parental roles and child rearing methods. It was difficult to determine whether there were significant differences between trade school and university students because the author stated in one place that the differences were insignificant while in two other places he pointed out their significance.

The author did see clear evidence in his research of the erosion of influences which had been associated with traditional attitudes in the area of parental behavior. This erosion is more evident in the English-speaking sample than in the French sample.

One Frying Pan

by MARJORIE ELWOOD

There are two more Hamburger Fixin's by French's on the market. The one packaged in the green box, contains gnochis macaroni, sauce mix, and vegetables. These when combined with a pound of ground beef in a frying pan means a delicious tomato italiano dinner in less than half an hour — makes 5 (1 cup) servings. The other, packaged in a bright orange box, contains macaroni, cheese sauce mix and vegetables. Add a pound of ground beef to all this and you've made a special cheeseburger deluxe dinner for 5 people. Each of these Hamburger fixin's retail at about 59¢.

Classic Brandies and Liqueurs from Niagara

Although they've been around since 1970, many of you may never have heard of Rieder Fruit Brandies and Fruit Liqueurs. This is because the annual production of them is small yet the products themselves compare with the best in the world. Mr. Rieder, a highly successful engineer by profession, gained his first experience of the distilling business from his family's small distillery in the famous fruit brandy district of Basel, Switzerland. When he came to Canada, he realized the similarity between the Niagara Peninsula and his native Basel. As a result, his 19-year dream of owning a distillery was fulfilled and the Rieder Distillery of Grimsby was started.

The uncompromising fine quality of Rieder products is attained by using only mature and fully ripened fruits for maximum essence and flavour, having an experienced European Still Master, consistent quality control and a modern plant using both contemporary European and North American techniques.

For those of you who do not understand the terms brandy and liqueur, here is a short explanation. Eau-de-vie (water of life) in the widest sense means brandy. Although all brandies made from grape wine are eau-de-vie, not all brandies are made from grapes. So there are many fruit brandies (eaux-de-vie) made from the wines of other fruits. They are mostly aged in inert containers rather than wood so their characteristic fruit flavour is preserved. They are highly aromatic, dry in taste and colorless.

In contrast, Fruit Liqueurs are made from an eau-de-vie (or brandy) base with fruit concentrates added to give them a succulent sweetness. They make a perfect dessert companion or after dinner drink.

Rieder's start with the fresh fruit of the Niagara District — cherries, peaches, plums, apples and grapes — making from each a fine fruit brandy appreciated by connoisseurs. Cherry (Kirsch), Peach, Plum and Pear Eau-De-Vie are the ones available. Kirsch is the king of all brandies, to be enjoyed in Cheese Fondue and Cherries Jubilee. Pommal-Apple Brandy — is the distillate of apple wine made from Macintosh and Northern Spy apples — all apple desserts gain stature with a sprinkling of Pommal added to them.

Rieder's have a real Canadian liqueur called Canadian Maple. Then there

are intriguing ones such as pêche Dorée (Peach Brandy Liqueur), William's (Pear Brandy Liqueur), and Prunelle (Plum Brandy Liqueur). All these add a new dimension to the Canadian distillery business and to fine dining. For further information write to Mr. Otto Rieder, Rieder Distillery Ltd., Suite 811 — 701 Evans Ave., Etobicoke, Toronto, Ontario, M9C 1A3.

French's Line

Reckitt and Colman have added three more interesting sauce mixes to their French's line: *Teriyaki Sauce Mix* — just add water and you have a delightful sauce for beef, chicken or spareribs; *Sweet N Sour Sauce Mix* — vinegar and water are all that is required to make this into a special sauce for Sweet N Sour Pork or for cooked shrimp. It also makes an excellent dip for egg rolls or Chinese spareribs; *Cacciatore Sauce Mix* — this mix plus a can of tomato paste and water simplifies the making of appetizing chicken Cacciatore. All of these sauce mixes sell for the same price as the original ones — about 29¢ per package.

Fry Pan Dinners

These Fry Pan Dinners are different from the usual ones in that each contains a can of perfectly blended sauce as well as egg noodles, dry spices and other seasonings. All one needs to add is a pound of ground beef and water to make a main course for four in about 15 minutes. I particularly liked the Stronganoff dinner for its full flavour and my assistant's comment about the Lasagne dinner was "really good". The distribution of these Fry Pan Dinners by Libby, McNeill & Libby is nation-wide. They sell for about 89¢.

Seasoning Mixes

Families are always on the go so Lawry's pre-blended seasoning mixes, both salad and sauce, are a great thing to have on hand for the quick preparation of many foods. These mixes make easy the preparation of Chili, Sloppy Joes and Spaghetti Sauce. They also help the fisherman in preparing his fresh catch and any camper will find these small seasoning packages helpful even in campfire cooking. Of course, it goes without saying that Lawry's Salad Dressing Mixes will make your salad preparation easy and interesting. For the free folder "Salad Secrets" write to Mrs. Margaret Howard, Home Economist, Lawry's Foods of Canada Ltd., P.O. Box 155, Toronto, Ont., M8Z 5P1. The salad dressing mixes available include a choice of Caesar, French and Thousand Island. They retail for about 2 for 39¢. The sauces range from about 27¢ to approximately 39¢ for the Wine Sauces.

Snackin Again

Those of you and your students who took an immediate liking to the first Betty Crocker Snackin Cakes — Coconut Pecan, Chocolate Almond and Banana Walnut — will greet with enthusiasm the two latest ones to be made available nationally. They are Apple-Spice Raisin — a rich, moist, tasty,

8-inch square cake, and Chocolate Chip — also a single layer cake filled with real chocolate chips. Like the first ones, these cakes are unbelievably easy to make, for water and vinegar are the only ingredients that have to be added to the mix. Nothing to do but stir all together in the 8-inch square pan, bake and serve — the only thing is there's no batter left in the bowl to lick, because there's no bowl. Each is packaged in a 15 oz. size, makes a single layer cake and sells for about 51 cents.

Helper Dinner Mixes

Betty Crocker kitchens have done it again — created two more ways to make the preparation of tuna very easy. To add to their original Tuna Helpers — Tomato Macaroni and Potatoes 'N Mushroom sauce — are Noodles 'N Cream sauce with egg noodles, peas and carrots plus a white sauce, and the second one Noodles 'N Cheese Sauce — having egg noodles and a Cheddar Cheese sauce. When a 6½ oz. can of tuna is combined with either one of these mixes and cooked in a frying pan or in the oven in a casserole you have a tasty change of pace tuna supper dish for five. They are in national distribution and retail for about 59 cents.

Space-Links

Space Links Inc., have introduced an all vinyl floor mat, Space-Links, that has a unique "cross-traffic" link design to provide greater anti-slip. They are so named because the 24 inch by 18 inch sections are easily linked together to fit every space requirement (even into and around corners) of a restaurant, motel, club, hospital or plant. They are available in just the one size, 24"x18", but in four colours — red, black, green and blue. The non-porous vinyl with which they are made is resistant to grease, oil, acid and alkali and is easily cleaned. They resist slipping even when wet so are practical for saunas and steam rooms. The open weave pattern affords greater foot comfort, makes an excellent anti-fatigue mat and cuts down on glass and china breakage. For further information contact The Bliss Company, 2206, 30 Gloucester Street, Toronto, Ontario, M4Y 1L6.

Steel Stand for Laundry Pair

General Steel Wares recently introduced a sturdy chrome plated, tubular steel stand to hold in compact fashion their Moffat and McClary laundry pair. With this stand holding the dryer on top and the twin tub washer underneath, any small space such as a closet or a corner of a room can be made into a "utility" corner. G.S.W.'s twin tub washer has the exclusive spiralator agitator, recirculating lint filter and a 12-minute wash timer. The compact dryer has a full 120 minute timer with settings for regular, permanent press, damp dry and a no-heat "fluff" cycle. In addition to the stand, the dryer can be wall mounted on an optional bracket. The steel stand retails for about \$18.00. G.S.W. Appliances Ltd. is an all-Canadian company and the largest marketer of home appliances in Canada.

Organization Centres

There's no escaping the plague of too little storage space, but there are ways to make the best possible use of the space you have. Developing organization centres not only makes more space, but will lighten the work-load too.

Take ironing, for example. Although permanent press and easy-to-care-for fabrics have cut down the amount of clothes in the "to be ironed" basket, the task has not been eliminated! But you can ease the load further and be more organized about ironing if you pull together all that's needed for the job.

One of the new ironing organizers from Rubbermaid can be the answer to keeping-it-all-together once the iron, ironing board, spray starch, sprinkler and pressing cloth are assembled. The organizer attaches easily to doors or walls and caddies everything you need.

Another storage help that aids in housekeeping chores, is the broom and mop organizer. It's for dust pan, mop, sponges, cleaner and broom — all in one neat place.

For those of you with no place to put all the vacuum attachments, a storage centre is now available to do it for you. The cleaning accessories, extension parts, vacuum bags and sweeper hose all fit into their own slots.

It's just plain logical. If you take a little time to arrange supplies and equipment in work centres, there will be time saved and you'll enjoy a sense of organization!

UNIVERSITY OF OTAGO Dunedin, New Zealand HOME SCIENCE SCHOOL

Lecturer or Assistant Lecturer in Clothing: Textiles

Applications are invited for the position of Lecturer or Assistant Lecturer in the Clothing Department of the School of Home Science, University of Otago. Duties to commence 1st February, 1974.

Salary range:

Lecturer : \$NZ 5,862 — \$NZ 7,497 per annum

Assistant Lecturer : \$NZ 4,089 — \$NZ 5,181 per annum

(Note: \$NZ 100 = approx. £50 sterling; \$US 134; \$A 90).

Salary scales are subject to both triennial review and regular cost-of-living adjustments.

Further particulars are available from the Secretary-General, Appointments Department, Association of Commonwealth Universities, 36 Gordon Square, London WC1, or from the undersigned. **Applications close in New Zealand and London on 15th October, 1973. LATE APPLICATIONS WILL BE ACCEPTED.**

J. W. Hayward
Registrar.

BOOKS

SECTIONS

1. Child and Family Studies
2. Foods and Nutrition
3. Housing and Interior Design
4. Management & Consumer Economics
5. Textiles and Clothing
6. Values
7. General References

CODE

- | | |
|----|---------------------|
| + | Intermediate Grades |
| ++ | Senior Grades |
| H | Hardcover Book |
| P | Paperback |
| S | Student |
| T | Teacher |

MANAGEMENT AND CONSUMER ECONOMICS

Better Business Bureau, 85 Richmond Street West, Toronto.
Consumer's Buying Guides: How to Get Your Money's Worth.
 1969. 205 pp. \$1.50 (++) (P) (S) (T)

A book to assist people in becoming more knowledgeable consumers in the marketplace. The text is based on the varied experiences of the 140 Better Business Bureaus in Canada and the United States. All sorts of purchasing tips, rules and guidelines are set out. The usual consumer areas of money matters, housing, home improvements, food, clothing, household appliances and furniture are well covered. An interesting chapter touches on more unusual consumer situations often overlooked, such as travel agencies, earn at home schemes, health quacks, franchises and the like. This is a good reference if general advice is sought or when a specific purchase is imminent.

Bohlman, Herbert W., and Edna M. Bohlman. *Knowing How To Budget And Buy.* Chicago: Follett Publishing Co., 1968. (Available Toronto: The Ryerson Press) 48 pp. \$1.45 (++) (P) (S)

A book which uses the decision-making approach. The text, simply written and posing a number of "real family" problem situations, would appear especially suitable for older students with limited reading skills. Exercises appear at the end of most chapters. Humorous cartoon illustrations are used. Of the 12 chapters, none with any particular depth, the one on knowing how to buy is especially good. The last two chapters on private agencies and government protection would have to be supplemented with the Canadian counterparts.

Fisher, John. *The Plot To Make You Buy.* Toronto: McGraw-Hill of Canada Ltd., 1968. 209 pp. \$2.95 (++) (P) (S) (T)

A book written by a Canadian, the central theme of which is the North American marketing system and its effects on the consumer. Mr. Fisher, once a member of the marketing fraternity admits in the preface that he is writing

from a considerably biased vantage point. The text glances at marketing, advertising, motivational research, packaging, sales promotion and public relations. Much criticism and some tentative solutions are offered. It is a useful book for it does contain a number of Canadian facts, figures and impressions not readily available. These do need to be interpreted with the book's tone in mind. Theme suggestions might be found in this book. Although this is not an academic text it is written with a certain caustic humour, providing entertaining and sometimes surprisingly informative reading.

Garrett, Pauline G., and Edward J. Metzen. *You Are A Consumer Of Clothing*. Boston: Ginn & Co., 1967. 177 pp. \$3.40 (+) (+ +) (P) (S) (T)

A text designed to help readers develop competence as consumers of goods and services in the modern economy using clothing as the subject to accomplish this aim. The authors do a great job of relating the management of resources to the consumer role. Stress is placed on understanding and applying all facets of the decision-making process. There are 10 chapters, each representing a possible theme. Each chapter concludes with a section called "extending your experiences" which includes the main chapter concepts, and provides excellent questions, discussion topics, activities, independent study ideas and related reading lists. A main purpose of the book appears to be the development of broadened concepts, basic principles and general understandings which are applicable in a number of different situations. An excellent book, of dual purpose, using a most relevant approach to the study of consumer economics.

Toelstrup, Arch W. *The Consumer In The American Society: Personal And Family Finance*. 4th edition. New York: McGraw-Hill Co., 1970. 668 pp. \$12.55 (+ +) (H) (S) (T)

An undergraduate college text, written in a highly readable style and exploring consumer problems, issues and alternatives. The author uses a quality of living framework to examine how the social, psychological and economic needs of individuals and families can best be met with the resources at hand. Three of the beginning chapters have content not found in earlier consumer education texts, those of decision-making, money and marital happiness, and money and democracy in home management. An attractive format makes it easy to pick out topics on each page. Discussion questions, activity problems and suggested reading lists follow most chapters. The book seems well researched. Certain information concerning economic calculations, financial institutions and government legislation are not applicable in Canada due to the U.S. orientation of the book. A valuable reference for teacher and senior student alike.

Weeres, Kenneth W., *Dollars And Sense: A Guide To Family Money Management*. Toronto: McGraw-Hill Co., 1970. 152 pp. \$3.25 (+ +) (P) (S)

A Canadian book offering general guidelines to the individual and to the

family on the major concerns in the management of money. The author has a business administration background and approaches his subject in this way. The book is divided into four parts with only two of particular interest to the Home Economics student, these being Family Finance and Consumer Purchases. Isolated chapters from the other two parts such as Landlord and Tenant Consumer Assistance are also relevant. Interesting assignments appear at the end of each chapter, some adaptable to independent study.

HOUSING AND INTERIOR DESIGN

Craig, Hazel T., *Homes with Character*. 3rd edition. Lexington, Mass.: D. C. Heath & Co., 1970. 482 pp. \$8.75 (+ +) (H)
(S)

An updated edition of a comprehensive housing text with broadened viewpoints on the social, psychological and managerial aspects of housing. The book is divided into five units: influences on housing; selecting a home; decorating a home; consumer buying for a home; maintaining and improving a home. This book is certainly not the complete answer to a senior course on housing. The first unit provides an excellent overview but the second unit presents a narrow view of what can constitute a contemporary home. Virtually no mention is made of the vast range of housing choices available today—townhouses, high rises, mobile homes, condominiums, co-ops, low cost housing. The one family dwelling is dealt with almost exclusively. A book published in 1970 is surely to be faulted in this respect. This unit contains a thoughtful chapter on social and personal values in housing. The unit on decorating a home displays a decidedly stereotyped middle class orientation. The last two units provide concise information regarding relevant problems. The book is highly readable and organized in a useful fashion with each chapter being introduced by guidelines for study stated in generalizations. Concluding each unit is a valuable reference list of related materials. Lush color plates at the beginning of each chapter are most attractive.

Wheeler, Michael. *The Right To Housing*. Montreal: Harvest House, 1364 Greene Ave., 1969. 349 pp. \$4.50 (+ +) (P)
(T)

The background papers and proceedings of the first Canadian Conference on Housing held in Toronto in 1968 under the sponsorship of the Canadian Welfare Council. In 1966, housing in Canada became a major political issue of national concern and this conference was in part an outcome of this concern. It involved some 600 delegates and participants from highly varied backgrounds and all parts of Canada. The text is divided into three sections: background papers; conference presentations and condensed discussion; future plans including reports from policy workshops and recommendations. The first paper by David V. Donnison, Director for the Centre for Environmental Studies in London, England on housing problems and policy is fascinating, as are many parts of the book. Other portions are highly technical and less easy to read. An excellent resource of Canadian housing information.

Steady, Richard. *Canadian Real Estate: How to Make It Pay.*
Toronto: Peter Martin Associates Ltd., 17 Inkerman Street.
1969. 236 pp. \$6.95 (+ +) (H) (T)

A text which explores the many facets of real estate—real estate as business, land speculation, investment property, private home purchasing, buying versus renting and more. Only particular portions of the book are relevant to the Home Economics program but these portions are so lucidly and logically set forth that the book is a decided asset to the classroom for ready reference. Included in the book is a dictionary of real estate terms and tables of interest factors and depreciation allowances.

ADELAIDE DANIELS WEIGHT WATCHING COOKERY

Clark, Irwin and Company Limited,
Toronto, Vancouver,
1972, 182 pages
(\$4.95 or \$7.95?)

Holding true to the title, Adelaide Daniels has produced an extremely attractive recipe book which strongly reflects both the "Weight Watchers" philosophy in the introduction and "Weight Watchers" brand name products in the text.

This dynamic "former fattie", as she refers to herself, has pulled together recipes geared to the weight watcher which range from "Beverages and Cocktails" to "Vegetables", including "Snacks", "Go-withs" and "Breakfast Ideas". Each and every topic is of vital interest to today's weight conscious eater. However, despite the artistic flair and appeal of this book, there is little more to recommend it.

Throughout the entire text, one cannot help but be aware of the "high cost of eating to lose" or why the rich get slimmer and the poor fatter. The recipes call for the almost exclusive use of fresh fruits and vegetables — an almost impossible feat in February and March, or for the use of expensive equipment such as a blender.

Despite the attractive titles on most pages, the recipes are unimaginative, repetitive and rely heavily on artificial flavours and sweeteners. For example, three of the dessert recipes, Grilled Grapefruit, Spicy Broiled Grapefruit and Peppermint Grapefruit, differ in only one ingredient — bitters, peppermint extract or mint leaves to garnish. The meat and vegetable dishes bombard the palate with the taste sensations of mushrooms, celery, garlic and onion flakes. Delicious but boring for a lifetime.

Other disturbing characteristics of the book relate to recipe quantities and nutrition information. The number of servings per recipe varies from individual to 4-6 servings. This lack of standardization is somewhat cumbersome. Since the book is designed for the individual on a special diet, some nutrition information or at least a listing of calories per serving would have been useful.

The reviewer agrees with the philosophy of this book — to help persons “change what and when they eat, in order to lose weight and keep it off”. However, on the basis of its narrow, expensive and uninformative approach, this book falls short in filling this need.

*Marilyn Winarski
Nutrition Service,
Ontario Ministry of Health.*

COOKBOOK FOR DIABETICS AND ALL THE FAMILY

Burns and MacEachern Limited
Toronto.
1972, 169 pages
\$3.75 Paperback.

The bright yellow colour and the everyday kitchen measuring utensils on the cover, reflect the new updated and practical family oriented approach of the 1972 revised edition of the Cookbook for Diabetics.

The 1963 original cookbook produced by the Ontario Dietetic Association at the request of the Canadian Diabetic Association has been extensively tested and revised to improve individual recipes, expand sections and introduce an atmosphere of good family fare.

All recipes have been home tested by the Ontario Dietetic Association Revision Committee members for palatability, appearance and ease of preparation. Over fifty new recipes plus a special Gourmet Section have been added. Yes — Cabbage Rolls, Tourtiere, Vichyssoise, Coq au Vin and Glazed Strawberry tarts for the whole family.

The array of taste-tempting favourite recipes easy-to-follow instructions and exchange values for single portions of the family size recipes all combine to make meal planning and preparation a pleasure for the ‘diabetic and all the family’.

*Marilyn Winarski
Nutrition Service
Ontario Ministry of Health.*

FOOD: FACT AND FOLKLORE

Alice Jenner

McClelland and Stewart Limited, Toronto, 98 pp. 1973 \$2.50

Food is probably second only to sex in the sacredness of personal spheres that man has begun to have challenged by the scrutinizing eye of the social scientist. While a supply of anthropological material examining family practices has long been available, it is only recently that such material has appeared on nutrition practices: Alice Jenner’s *Food: Fact and Folklore* is one of these.

Consistent with the aims of McClelland and Stewart’s Curriculum Resources Book Series, it is a “stimulus” resource suited to use in various culture-oriented courses (including Geography, Man and Society etc. as well as Home Economics). Like sex education, it may well be that nutrition

education would best be incorporated into school curricula with this "holistic" perspective which realistically reflects the roles of both sex and food in most cultures.

A range of social and technological aspects of food consumption is presented through selected readings followed by thought-provoking questions designed to allow the student to draw on his or her own experiences. Interest in Nutrition could be generated by a look at "Miles for Millions", world food losses, recycling or space foods . . . to name only a few of the forty topics.

One reservation regarding the use of this book is whether most teachers (home economists or otherwise) will be adequately prepared to act as a resource person in assisting students follow up on the readings. The questions most certainly provide an insightful and complete guide to the examination of the issues. However, a resource list of reliable books and journals, further readings, and relevant government departments and agencies would increase the potential of this book as a study guide.

*Jennifer Welsh,
Ryerson Polytechnical Institute,
Toronto.*

BOOKLETS

A PUT DOWN JOB

With the ever rising cost of food, the controversy over the use of chemical fertilizers and food additives and the increased leisure time, more and more people are turning to gardening and growing their own fruit and vegetables as a hobby, for economic measures or just for the sheer pleasure of food with that fresh picked flavour. Even apartment dwellers and children are joining the march back to the land. Many communities rent allotments of land for as little as one dollar for the season and some even have special allotments for children who can enjoy gardening together with special Saturday morning gardening lessons.

With the harvest of the produce the womenfolk of the backyard farmers have found their pioneer spirit growing; they have dusted off their preserving kettle and pulled out grandma's recipes in an effort to preserve the enjoyment of home grown flavour for the winter months.

Although there are several ways to preserve food, pickles, chutneys and relishes have a place in the meal occupied by no other food.

These vegetable-fruit mixtures, aromatic and spicy, stimulate the taste buds and give added pleasure to any meal.

If you're planning to put down some pickles, or if you would like to try pickling for the fun of it, you'll be pleased to hear about a new pickle booklet. **PICKLES 'N THINGS** is offered free of charge by the Sifto Salt people. It contains 16 pickle, chutney and relish recipes as well as helpful information for the novice pickler and many serving ideas. Whether you're taking up pickling as a hobby or whether you're motivated by economy, **PICKLES 'N**

THINGS can help you to put down an array of colourful jars of pickles with that distinctive flavour of homemade.

For your free booklet write to: PICKLES 'N THINGS, Department "P", Domtar Chemicals Ltd., Sifto Salt Division, P.O. Box 7212, Montreal 101, P.Q.

GUIDE TO FOOD GRADES

This booklet explains the meaning of federal grades and tells to what extent graded foods are available and has replaced publication 1305, Buy by Grade. Copies are available from: Information Division, Canada Department of Agriculture, Ottawa K1A 0CT.

THE WHIP OF WEIGHT — AND WHAT TO DO ABOUT IT

Produced by General Foods in response to growing concern about the incidence of obesity and overweight in Canada. The information in the booklet was obtained through consultation with leading nutritionists and with the special assistance of Dr. G. H. Anderson, Department of Nutrition, School of Hygiene, University of Toronto. Copies are available by writing to: "Weight", 2200 Yonge Street, Toronto M4S 2C6.

HOW TO BE A WISE INVESTOR

A 40 page illustrated publication which presents guidelines for current and future savings and investment objectives for families, individuals, consumer educators and students. Copies available for twenty five cents each from: Money Managment Institute, Household Finance Corporation of Canada, 85 Bloor Street East, Toronto 5, Ontario.

MICROWAVE COOKING

A 20 page booklet answering the most common consumer questions about cooking with microwave energy. Subjects covered in question and answer form include principles of microwave cooking, benefits, utensils, safety, operation and effective-use. Copies of this publication (No. 90-2182) are available from HOTPOINT — Building 4 — 206A, Appliance Park, Louisville, Ky. 40225.

SAUSAGE SORCERY

Features a wide variety of sausage recipes for main meal courses and snacks and a nutrition chart showing food value of various types of sausage. Copies available from Union Carbide of Canada Limited, 123 Eglinton Avenue East, Toronto 12.

FILMS & FILMSTRIPS

The 16mm films listed are teaching aids for students of home economics and foodservice. They are sources of information for the meat industry, which entertain and inform the consumer, in sound and colour.

Pork Perfect Pork

A fine information film combining the development of the new lean pork in Canada with the preparation of appetizing pork dishes. *A new production of the Ontario Pork Institute*, it comes with an accompanying recipe folder. (Please state number required).
14 minutes, colour, 16mm.

Pork — An American Tradition

Ralston-Purina's bright contribution to the new pork story. This film deals with today's delicious lean pork and their Home Economist discusses and demonstrates the variety of ways it can be served.
15 minutes, colour, 16mm.

Pork With the Gourmet Touch

A culinary tour of the Ports of Call dining rooms of the Toronto restaurant complex. Gourmet treats for the eye as well as the palate. Prepared by Agriculture Canada.
15 minutes, colour, 16mm.

Facts About the New Pork

Pork — nutritious as well as delicious — is the message from this film prepared by the Chicago head office of the National Livestock and Meat Board. Medical spokesmen support the new lean product; pork dishes demonstrate its versatility.
17 minutes, colour, 16mm.

FOR RESERVATIONS

These films may be borrowed in Ontario by writing to: Films, Ontario Pork Institute, P.O. Box 69, Mississauga, Ontario, L5A 2Y9.

Out of Ontario: The Secretary, Canadian Pork Council, 111 Sparks Street, Ottawa K1P 5B5.

Please allow three weeks prior notice and, when possible, alternative dates.

MISS JESSIE MADILL

News of the death of Jessie Madill has been received. Miss Madill, a Nova Scotian by birth, spent most of her professional career as matron and chief dietitian of the Nova Scotia Youth Training Centre, retiring in 1963.

She was an enthusiastic member of the N.S.H.E.A. and the C.H.E.A. She was also involved with other professional and service organizations, and at various times held office in most of them.

Miss Madill contributed greatly to all phases of community life — she will be greatly missed by many.

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Miss Patricia A. Stearman, 6370 Fremlin St., Vancouver 13 — Teacher, Textiles.

Miss E. Kathy Stuart, 2376 West 12th Ave., Vancouver 9 — Officer Manager.

Mrs. Ivy A. J. Turner, 4436 Price Crescent, Burnaby 1 — Teacher.

ALBERTA

Miss Shirley J. Christianson, Ste. 206, 15507 - 87 Ave., Edmonton — Medical Dietitian.

Mrs. Janis L. Lauman, Alberta Dept. of Agriculture, Rm. 502, 620 - 7th Ave. S.W., Calgary T2P 0Y8 — Regional Food & Nutrition Specialist.

Mrs. Candace J. Long, Box 858, Barrhead T0G 0E0 — District Home Economist.

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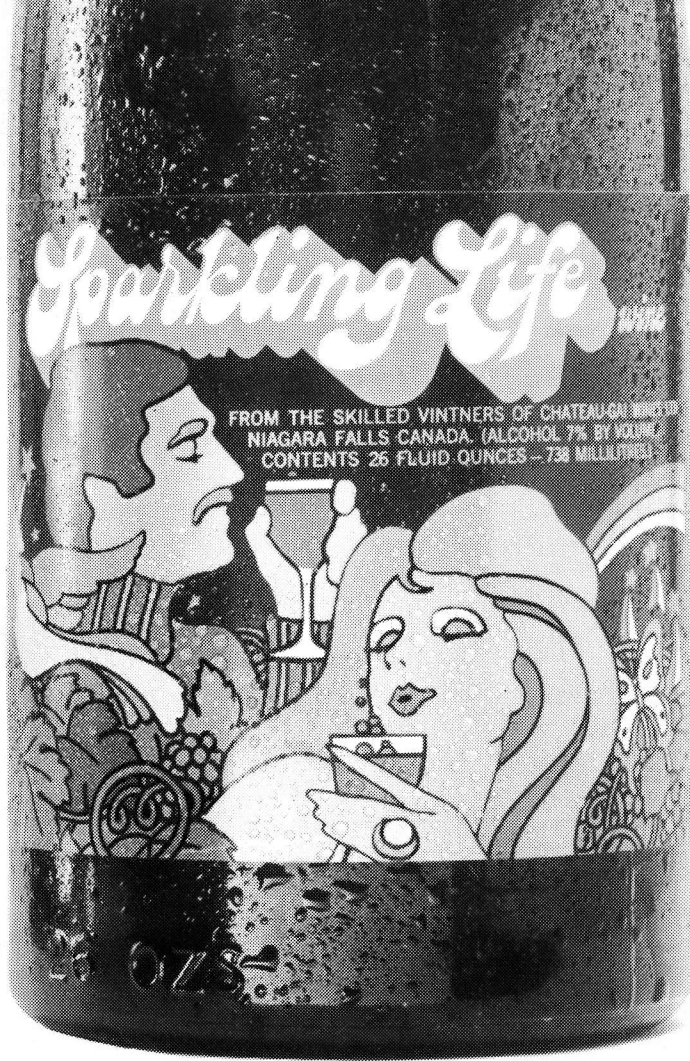
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